

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

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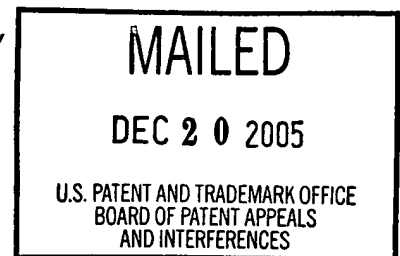
BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte NAGENDER P. VEDULA,  
DHARMA K. SHUKLA and  
ADITYA G. BHANDARKAR

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Appeal No. 2005-2295  
Application 09/662,399



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HEARD: NOVEMBER 16, 2005

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Before THOMAS, RUGGIERO, and NAPPI, Administrative Patent Judges.  
RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-45, which are all of the claims pending in the present application.

The claimed invention relates to function objects or "functoids" which are graphically linked between a source object and a target object in a graphical user interface of a mapping tool.

The function objects include a script component for performing a function, a graphical component permitting a user to use the function object to create a mapping in the mapping tool, and an interface component providing access to the script and graphical components. According to Appellants (specification, page 5), the claimed function objects, in contrast to conventional mapping tools which require the mapping of code programs in complicated programming languages, provide for the creation of complex mappings by graphically associating source and target objects through simple links and function object graphical components.

Representative claim 16 is reproduced as follows:

16. In a mapping tool with a graphical user interface, a method of creating a mapping between a source object having a source object node and a target object having a target object node, the method comprising:

providing a function object having a script component with computer-executable instructions for performing a function, a graphical component associated with the function and having an input and an output, and an interface component;

displaying the graphical component in the user interface;

graphically associating a source object node with the input using a user interface selection device;

graphically associating a target object node with the output using the user interface selection device; and

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creating a mapping including the computer-executable instructions, and operative to perform the function according to the source object node, and to provide an output value associated with the target object node according to the function.

The Examiner relies on the following prior art:

Oppenheim	5,734,905	Mar. 31, 1998
Jordan	5,778,227	Jul. 07, 1998
Faustini	6,496,870	Dec. 17, 2002
		(filed Jan. 31, 1997)

"Component Object Model Specification, Part I: Component Object Model Introduction," Version 0.9, Microsoft Corporation (Microsoft), retrieved 2/26/2003 from the internet <URL: [http://activex.adsp.or.jp/Japanese/Specs/COM\\_Spec/COMCH01.Htm](http://activex.adsp.or.jp/Japanese/Specs/COM_Spec/COMCH01.Htm)>, 1-28 (October 1995).

Claims 16, 23, 30, 32-35, 37, 38, 41-43, and 45 stand finally rejected under 35 U.S.C. § 102(b) as being anticipated by Oppenheim. Claims 1-15, 17-22, 24-29, 31, 36, 39, 40, and 44 stand finally rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers Oppenheim in view of Microsoft with respect to claims 1-15, 17-22, 24-27, and 44, Oppenheim in view of Jordan with respect to claims 28, 29, and 31, and Oppenheim in view of Faustini with respect to claims 36, 39, and 40.

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Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs<sup>1</sup>, the final Office action, and Answer for their respective details.

#### OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections, and the evidence of anticipation and obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the disclosure of Oppenheim fully meets the invention as recited in claims 16, 23, 30, 32-35, 37, 38, 41-43, and 45. In addition, with respect to the Examiner's obviousness rejections, we are of the opinion that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary

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<sup>1</sup> The Appeal Brief was filed February 13, 2004. In response to the Examiner's Answer mailed December 28, 2004, a Reply Brief was filed February 18, 2005, which was acknowledged and entered by the Examiner as indicated in the communication mailed May 25, 2005.

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skill in the art the obviousness of the invention as set forth in the appealed claims 1-15, 17-22, 24-29, 31, 36, 39, 40, and 44. Accordingly, we affirm.

We consider first the Examiner's 35 U.S.C. § 102(b) rejection of claims 16, 23, 30, 32-35, 37, 38, 41-43, and 45 based on Oppenheim. At the outset, we note that Appellants' arguments in the Briefs are directed to features which are common to each of the appealed independent claims 16, 32, 33, 41-43, and 45 subject to the rejection under 35 U.S.C. § 102(b). Accordingly, we will consider independent claim 16 as the representative claim for all the claims subject to this rejection, and claims 23, 30, 32-25, 37, 38, 41-43, and 45 will stand or fall with claim 16. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

It is well settled that anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and

Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

With respect to representative independent claim 16, the Examiner indicates (final Office action, pages 5-7) how the various limitations are read on the disclosure of Oppenheim. In particular, the Examiner directs attention to the embodiment illustrated in Oppenheim's Figure 8 along with the accompanying description at column 8, lines 23-65 of Oppenheim. According to the Examiner, the transformer object (Signal Processor 272) in Oppenheim corresponds to the claimed "function object" and operates to provide a mapping between a source object (A/D Converter 270) and a target object (Filter 276). As asserted by the Examiner, the mapping function in Oppenheim involves graphically associating source object nodes with target object nodes using a drag-and-drop technique in conjunction with the transformer or function object. The Examiner also indicates that, as presently claimed, the transformer or function object in Oppenheim includes a script component (column 5, lines 38-50), a graphical component (column 3, lines 37-39), and an interface component (column 5, lines 30-45).

In our view, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has at least satisfied the burden of presenting a prima facie case of anticipation. The burden is,

therefore, upon Appellants to come forward with evidence and/or arguments which persuasively rebut the Examiner's prima facie case. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)].

Appellants' arguments in response assert that the Examiner has not shown how each of the claimed features are present in the disclosure of Oppenheim so as to establish a case of anticipation. Initially, Appellants contend (Brief, pages 4-6) that, in contrast to the claimed invention in which a "function object" is employed to associate a source object to a target object, Oppenheim utilizes application programs to enable data to flow through disparate application programs.

After reviewing the Oppenheim reference in light of the arguments of record, however, we are in general agreement with the Examiner's position as stated in the Answer. In particular, we agree with the Examiner that the Signal Processor 272 in Oppenheim satisfies the broadly stated definition of "function object" asserted by Appellants appearing at page 4 of Appellants' specification, i.e., an elemental unit of functional transformation." We fail to see why the Signal Processor component

in Oppenheim which, as correctly asserted by the Examiner is properly construed as an application program object and not an application program as argued by Appellants, performs a data transforming function on data at its input and makes it available at its output would not be considered a "function object" in accordance with Appellants' own definition of such term. In our view, there is simply no disclosure of any function object structure in Appellants' disclosure that would require the interpretation of the claimed "function object" language that is urged by Appellants in their Briefs.

We further find no error, Appellants' arguments (Brief, pages 5 and 6; Reply Brief, pages 3 and 4) to the contrary notwithstanding, in the Examiner's assertion (Answer, page 7) that, in Oppenheim, the utilization of a drag-and-drop technique in conjunction with the function object (Signal Processor 272) acting as a mapping tool performs a graphical association or mapping of the source object (A/D Converter 270) and the target object (Filter 278). Similarly, we find to be without merit Appellants' contention (Brief, pages 5 and 6; Reply Brief, pages 4 and 5) that the system of Oppenheim does not operate to associate "nodes" of the source and target objects. We agree with the Examiner (Answer, page 11) that the system described by Oppenheim can be reasonably interpreted as



disclosing objects which have points, i.e., nodes, to which other objects may be linked, for example, associating a source object node, i.e., the output of the A/D converter with a target object node, i.e., the input of the Filter.

We further agree with the Examiner (id. at 12 and 13) that, even considering the claimed "nodes" as being structural components of particular schema as disclosed in Appellants' specification, Oppenheim teaches that objects may include multiple input and output ports. As also alluded to by the Examiner, Oppenheim's discussion (column 3, lines 15-30) of the connection of multiple input and output ports of different application programs would, in our view, lead to the conclusion that such application input and output ports would be associated with a particular variable of a schema employed in an object, and thereby be reasonably considered as "nodes."

In view of the above discussion, since all of the claimed limitations are present in the disclosure of Oppenheim, the Examiner's 35 U.S.C. § 102(b) rejection of representative independent claim 16, as well as claims 23, 30, 32-25, 37, 38, 41-43, and 45 which fall with claim 1, is sustained.

We also sustain the Examiner's 35 U.S.C. § 103(a) rejections of claims 1-15, 17-22, 24-29, 31, 36, 39, 40 and 44 based on the combination of Oppenheim with various ones of the Microsoft, Jordan,

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and Faustini references. Appellants have effectively chosen to let these rejections stand or fall with the rejection of claim 16 as the only arguments in response reiterate those made with respect to claim 16, which arguments we found to be unpersuasive for all of the reasons discussed supra.

In summary, we have sustained the Examiner's rejections of all the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-45 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective September 13, 2004).

AFFIRMED

James D. Thomas  
Administrative Patent Judge

*Joseph F. Ruggiero*  
Joseph F. Ruggiero  
Administrative Patent Judge

BOARD OF PATENT  
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~~Robert Nappi~~  
~~Administrative Patent Judge~~

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